

SOVIET PAVILION

SPOKANE, USA, MAY-NOVEMBER '74



... we cherish the freedom, peace and welfare of our people and we wish freedom, peace and welfare to all the peoples of the world

LEONID BREZHNEV, General Secretary, Central Committee of the Communist Party of the USSR

The alliance of man and nature

Our countries are thousands of kilometres apart, with the sun, too, needing at least seven hours to negotiate this great distance.

But as you cross the threshold of our pavilion, you stride through space and time and find yourself in the Soviet Union, a country with vast natural resources, stupendous projects, and epochal achievements.

As if by magic, towns, forests, rivers, lakes, factories, power stations, farmland and vineyards spring up before your very eyes, and you strike out on an engrossing journey round the Union of Soviet Socialist Republics.

You will see here man's great love for nature, and what he is doing to make this love reciprocal.

You will learn of amazing schemes for remaking the planet Earth and their actual embodiment in the deeds of man, not in decades from now and not tomorrow, but today.

Films, pictorial dioramas, designs and works of graphic art will move aside the pavilion walls, and

you will cross an invisible bridge to the very sources of the Universe. You will hear of «biospheres of old», as put by Vladimir Vernadsky, of the oldest of geological periods and the present-day biosphere of Earth: of the very first decrees, signed by Lenin. on the protection of nature, decrees which have become the foundation of our state policy in the rational use of natural resources; of the organisation of relationships between man and nature in a socialist state, and, lastly, about Man himself, who is boldly remodelling Earth not in a haphazard way, but with due consideration for the great laws of nature, and armed with intelligence, knowledge and good will. Whatever the subject may be - the elaboration of standards defining the work of enterprises capable of contaminating the air and water, the founding of wildlife sanctuaries; the teaching of our young people to both safeguard and admire the beauty of nature — the narrative always concerns the alliance of man and nature, an alliance for the benefit of both.

Natural wealth the property of the entire people

One-sixth of the land surface of the globe is occupied by the Union of Soviet Socialist Republics. There is an immense chased bas-relief map on the pediment of our pavilion. This is the symbol of our country and simultaneously the story of its marvellous country-side, the inimitable multiformity of its fauna and flora, the green freshness of the woodlands and the wild beauty of the mountains, the white silence of the Arctic, the sultry breathing of the desert, the generous fertility of the steppes, and the fabulous mineral wealth. However, prior to the Great October Socialist Revolution, when the only thing that regulated relations between man and nature was the drive for profit, this wealth was greedily exploited by a handful of landlords and industrialists. This is why the first legal acts of the world's first workers' and peasants' state were the Decrees on Peace and on

the Land, adopted on the initiative of Lenin. The Decree on Peace proclaimed war «the greatest of crimes against humanity», and defined peace as the main prerequisite for the use of all natural resources for the benefit of man. The Decree on the Land abolished landed proprietorship, and made the country's natural wealth the property of the entire people.

The great Lenin, the founder of the Communist Party and the world's first socialist state, regarded care for the treasures of the land, and for its mineral wealth as one of the main preconditions for success in building socialism. With his immediate participation, the Soviet government, in the early years of its existence, elaborated 200 decrees on the protection of nature and the rational use of its resources. In that grim period, when the country was gripped by hunger and devastation, and armed intervention forces closed in on Moscow and Petrograd, the Soviet government, led by Lenin, passed a number of decrees, including those on the forests, the use of fishing grounds, on hunting periods and the right to possess sports guns, on the establishment of the

Astrakhan wildlife sanctuary in the lower reaches of the Volga and of the Ilmen preserves in the Urals, and on the studies of the country's wealth by the Academy of Sciences.

These documents became the foundation of Soviet laws on the preservation and the rational, i.e., complex use of natural resources in the interests of socialist society as a whole, in the interests of the people and their future.

The proposal, advanced by the USSR Supreme Soviet's Standing Commission for the Protection of Nature, that all undertakings for such protection, for environmental protection and improvement, be included in the annual and five-year economic development plans of the USSR, and also that they become part and parcel of a special section of a long-range economic development plan, now being drawn up, became law as of January 1, 1974. This law marks another stage on the complicated and thorny road of struggle for protection of the biosphere, the start to which was made by Lenin's initial decrees.

Some of the important landmarks on this road are described in the opening section of our exposition.

Man and the biosphere

As soon as you step inside the pavilion, you see the amazing and wonderful world of nature around you. The grass rustles softly under your feet, the trees and bushes show green, and everything is flooded with light coming from a giant-size electric sun in the centre of the hall.

This is a model of the mammoth biosphere, and you are inside it; you are its creation, its particle, a participant in that great cycle of substances which gives birth to life every hour, minute, and second. You are an active participant, but not a sovereign reigning supreme. Today you most probably feel like the being that Engels referred to when he said that we are not the ones who rule over nature, but, instead, that «we, with our flesh, blood and brain, belong to nature and exist in its midst.»

The biosphere is the part of the world where life can exist. It embraces the surface of the Earth, the

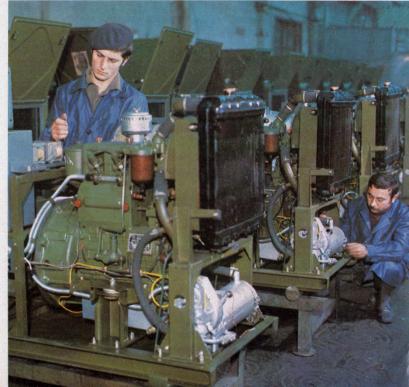


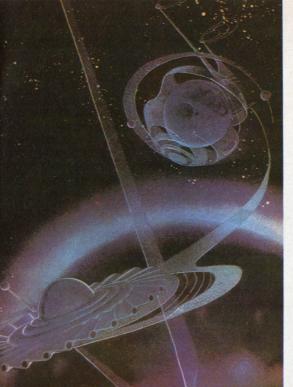


upper part of the Earth's crust, the rivers, lakes, seas and oceans, as well as the lower part of the atmosphere.

Complicated cyclical processes are taking place in the biosphere. For three billion years now, these processes, like lifesupport systems in a colossal space laboratory, have been maintaining life on our planet.

The evolution of life on Earth was inseparably linked with the constantly intensifying influence of animate on inanimate matter, and each new species of flora or fauna invariably became an integral part of those processes which ensure the ecological equilibrium of the planet.





However, with the origin of humanity and the development of technology, man's spontaneous activity became a source of processes of a global scale and disrupted many elements in this balanced cycle of substances in the biosphere.

The only alternative to the oncoming ecological crisis is the planned and scientific regulation of the relations between man and nature. The beginning of such regulation signifies the gradual transformation of the **biosphere** into a **noosphere**, i.e., into a sphere of Earth, organised and guided by the human mind. Hereafter, their conformity not only with the present-day requirements of man but also with the entire progress of life on Earth, becomes the criterion of any economic activity and the achievements of technical progress.

Man is, thus, confronted with a far greater task than simply protecting the biosphere against his impact. The matter is connected with the utmost rational transformation of the biosphere and the enhancement of its productivity on the basis of natural laws and the laws governing the development of human society. Indeed, nature is a remarkable temple, but man has settled down in it, and he has the right to reconstruct it in such a way that would, while retaining the architect's original conception, make





this temple still more beautiful and convenient to live in.

It is absurd to contrast such notions as "the protection of nature" and "the transformation of the biosphere". As Academician Stanislav Schwartz pointed out, the surest way to safeguard the biosphere lies not through passive "protection", but through the intelligent and scientifically-substantiated use of natural resources.

The conception of the Earth's biosphere was evolved and set forth by an outstanding Soviet scientist, Academician Vladimir Vernadsky, the founder of the general teaching on the biosphere, as well as a number of new sciences such as geochemistry, biogeochemistry and geological chronology. Thirty years ago, he emphasised that, in its scale, the technological activity of man is already comparable to geological processes, and predicted the gradual conversion of the biosphere into a noosphere.

The visitors to the exposition will be able to familiarise themselves with Vernadsky's brilliant ideas and also with the works of other Russian and Soviet scientists on questions pertaining to the study of the resources of the biosphere and their rational use and protection.



Air is life

Air is life. When air ends, death comes on in a matter of minutes. The biggest oxygen-producing factory, created by nature itself, is the greenery covering our planet, the forests and bushes, and also the phytoplankton of the World Ocean.

Just look around you and you will see that you are in a grove, or rather one of the recreational woodlands which have become component parts of our urban communities. Before you are pictures of forests, mock-ups of holiday homes, motels and camping sites.

In one hour a hectare of woodland absorbs as much carbon dioxide as is exhaled in that period of time by 200 people, while in the course of a year it can filter up to 68 tons of dust from the air. The forests in our country cover an area of 910 million hectares. They account for one-fifth of all the wooded areas on Earth. Though this is a vast total, each hectare of wooded area is under strict state control, because it not only provides timber for our country's national economy, but also air for all the living creatures on the planet.

We are engaged both in reforestation and afforestation. For instance, in the period of the Eighth Five-Year Plan (1966—1970), we cut down 10.2 million hectares of woods, and reforested 11.2 million hectares. In order to shield the soil against erosion, we intend to plant forest belts over an aggregate area of 12—14 million hectares, and some 50 million hectares more to protect our fishing and water resources. The oxygen of the woodlands fills the lungs of big cities and purifies their smokeand dust-contaminated atmosphere. The area of urban woodlands will soon be doubled and will total 28 million hectares.

Look at the mock-up of Moscow with its green woodland necklace, and you will immediately realise why the air in our capital is cleaner than in any other city of its size. Indeed, one sees here 130 hectares of parks, gardens and groves per 1,000 of the population.

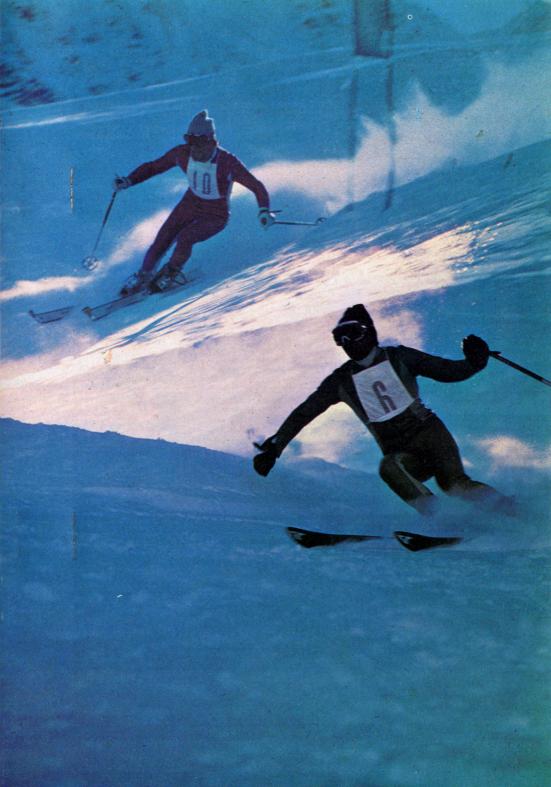
Though wooded areas are a vital factor, they are not the main one determining the purity of the Earth's atmosphere today. Take another look at Moscow, and you will see that in the last three or four years alone, about 300 enterprises have been removed beyond the outskirts of the city, 1,200 boiler-rooms have been switched from coal to gas, and 4,000 industrial installations have been provided with dust and gas traps. The whole complex of these undertakings has made it possible to reduce the amount of dust in the city air by 80 to 83 per cent, and its contamination with sulphurous gas, by 66 to 75 per cent.

Take notice of the four mock-ups and eight

illuminated diagrams of gas-purifying installations, all of which are shown in a single complex mock-up. These are the main, global trends of the titanic battle being waged by the USSR for purity of the air. Though the language of diagrams is understandable to the initiated, each one of them gives a vivid picture of how the fox-tails of sinister-black and poisonous-yellow smoke, curling out of factory stacks, have been growing paler and paler.

Under the Soviet laws on the protection of nature, not a single factory, shop or unit can be commissioned if special purifying systems are missing. Enterprises that fail to abide by gaspurifying rules run the risk of being closed down temporarily and the management being sternly punished, up to the point where criminal proceedings can be instituted. In 1972, for instance, 90 enterprises in the Russian Federation were temporarily rendered inactive for not carrying out instructions concerning the protection of nature. Keeping the air clean involves a whole number of intricate scientific, technical and moral problems, many of which are still far from being solved. For instance, in order to protect the atmosphere against exhaust fumes, engineers are building electromobiles. However, scientists still have to find out





what effect the electromagnetic fields of millions of electromobiles in cities will have on man.

There are many more such examples, but we trust in the power of man's intelligence, morality, and ability to protect the air, the most precious of nature's endowments, for coming generations.

Nature's great performance

Water, the World Ocean, is the cradle of life. No wonder that the spirit, conjured by Faust, tells him: In Life's swift currents, in Action storm,

I surge like a wave,

Heave to and fro!

I, Birth and Grave;

Am eternal flow;

Am changeful weaving,

Aglow and living.

Thus seated at Time's whirring loom I create The Deily's garment in nature's estate.

Wherever there is water, the forests and fields are green, and orchards blossom; whenever water is lacking, the desert is the ruler.

The gentle murmur of transparent fountains and cascades of water strikes the ear as one steps inside the hall devoted to the water resources of our

country. The display stands here are like islets in the sea. Their cupolas rise above the blue pools. Bridges link the stands in this world of water, which will tell you what a big role is played by the rivers, lakes and seas in our country.

The Soviet Union holds a leading place in the world in water resources, and, particularly, in stocks of fresh water. It has more than 200,000 rivers, all in all some 5 million kilometres in length, and also 1.600 lakes. However, nature has distributed these rivers and lakes very unevenly: 87 per cent of the water resources are in the northern and eastern parts of the country, inhabited by only 14 to 15 per cent of the population of the USSR. Statistics show that, in per capita terms, water consumption in the south of the European part of the USSR constitutes only one-eighth of the corresponding figure for the north. In order to rectify this disproportion somehow, the Soviet Union has built more than 3,700 kilometres of canals and over 200 water storage bodies holding about 400 cubic kilometres of fresh water.

One of these canals runs through the Kara-Kum Desert in Turkmenia, Central Asia. Our colourful display shows you how this previously unpopulated and unfertile "Desert of Death", as it was called, has been transformed into a flourishing area. It is a wonderful poem about Man remaking Earth in

keeping with the laws of Reason.

These waterways, however, only form a partial solution to the problem. This is why our scientists and engineers are drawing up still bigger projects envisaging the reversing the flow of northern rivers southward, and of Siberian rivers, to the Aral Sea in Central Asia.

We are not only building new waterways and reservoirs, but also being very economical with those endowed by nature. Special decisions have been adopted by the Central Committee of the Communist Party and the USSR Council of Ministers on measures for the prevention of pollution of the Caspian Sea, Lake Baikal, and the Volga and Ural Rivers.





In the basins of these two rivers alone, the last five years have seen the completion of the construction of 670 sets of purification plant, while in 1972 alone, as many as 1,748 sets were built throughout the USSR.

Here, too, one will see mock-ups of enterprises and illuminated diagrams of water recirculation technologies. Take note of the diorama mock-up of a refinery, which annually turns out 12 million tons of oil products, without a single drop of polluted water being discharged into the water body.

The section of our exposition which is dedicated to water resources is just as diverse as the aspects of participation of water in human activity and in the processes occurring in the biosphere. Photos and photo panoramas, as well as illustrated panels and slides give a vivid account of such giant hydropower stations as the Krasnovarsk station on the Yenisei River (capacity - 6 million kw.), the biological purification of water bodies, the artificial breeding and acclimatisation of fish, and the protection of the water of the seas washing the shores of the Soviet Union, and the water of the world ocean, where our ships also sail . . . And yet, the main attraction of our exposition is the pictorial story of Lake Baikal, one of nature's most unique creations.

Transparent as the air, fathomless as the sky, and brilliant as a diamond, Lake Baikal is not only the embodiment, but also the wisdom, of the heavenly beauty of nature. Its depth extends to 1,940 metres, and it holds one-fifth of the world's stocks of fresh water. Not only is this water fresh, but also incredibly pure, and so transparent that one can see clearly everything lying up to 40 metres beneath the surface. The gorgeous Angara River, flowing out of the lake, is many times purer than the water of the 330 rivers and streams that fall into Baikal. The latter, therefore, is a natural biofilter of vast capacity, and the purification of its water is conditioned by a whole set of biological processes, which we still have to explore.

The Baikal area is dotted with preserves and sanctuaries accommodating 2,000 species of plants and animals. The only industrial spot is a paper and pulp mill. The cost of its water purifying facilities amounts to a quarter of the total investments in the enterprise.

The illuminator-filmscreens grow dark, and you return from your boat excursion on the lake. We hope that you have sensed the beauty and the magnitude of this great performance of nature called Baikal.



Working for soil fertility

When the soil lost its fertility and whole tribes died of famine, the ancient Greeks explained this as the wrath of Demeter, the beautiful Goddess of the fruitful soil. Contemporary man is confronted by a similar situation, by the erosion of the soil, a far more powerful and treacherous enemy than an angered goddess.

The fight against wind and water erosion, the steps which we are taking to increase the fertility of the soil, the recultivation of lands, and the development of deserts for agricultural production — all this is explained by a big diorama showing the various landscapes of our country, the steppes, highlands, wooded areas, and deserts. It is much easier and cheaper to guard the soil against erosion than to restore the soil covering which has already been damaged by erosion. Windbreak forestation, amelioration, and the application of mineral fertilisers are some of the measures which today largely determine the standards of agricultural production.

The soil is being destroyed not only by erosion, but also by industry. With excavators gnawing the layers of earth, and opencast mines building mammoth heaps of capping alongside them, we see something reminding us of sombre moonscapes. But, in the Soviet Union, such ugly sights are gradually disappearing: under our laws on the protection of nature, enterprises are obliged to recultivate the land where the soil covering has been damaged by work operations.

Still, it should be admitted that recultivation involves considerable cost. The question is: will such expenditure and recultivation of land be justified and profitable? There can be only one answer: yes, it is just as profitable as the very existence of humanity and the entire planet.

However, harvests do not only depend on the fertility of the soil, but also on an effective fight against agricultural pests. Our exposition gives a detailed account of the biological methods being elaborated and applied in our country in protecting plants. You may wonder why we are using biological methods. The reason is that, as distinct from chemical, biological methods do not contaminate the environment, hence, the future belongs to them.

True, we cannot as yet fully reject the use of chemical methods, the application of pesticides, because the variety of biological means of plant protection is still limited. Nevertheless, our country has the strictest rules and regulations on hygiene in the world concerning the use of pesticides. The application of DDT in livestock farming was banned in the USSR in 1962, and later, in crop husbandry as well.

No matter how carefully man interferes in living nature, this interference inevitably upsets the biological equilibrium which has formed over the past millennia. This is why great importance is attached to the organisation of sanctuaries and preserves where nature keeps in its original beauty and grandeur.

Our country has 104 wildlife sanctuaries, extending over a total area of 7.5 million hectares. They can be found in the tundra, taiga, steppes, mountains and deserts. You will be told the whole story by our big and picturesque panoramic display with stuffed elks, aurochs, minks and other animals inhabiting the various zoogeographical zones of the USSR. All in all, our territory is inhabited by 359 species of mammals and over 700 species of birds. Some of them are down in the Red Book of the International Union for Conservation of Nature and Natural Resources. Incidentally, the last two centuries have witnessed the complete disappearance from our earth of 150 species of animals and birds, whereas on the territory of the Soviet Union not a single species of wildlife has become extinct.

Symphony of stone

The Soviet Union is among the very few countries in the world possessing practically all the kinds of mineral resources known on Earth. The story of our mineral wealth is told on a big decorative panel as well as by a unique collection of specimens of minerals to be found in various parts of the USSR. Minerals are not only raw stocks for industry, but also material for artists. In front of you is an exposition of coloured polished decorative stones. If you take a closer look, you will see delicately-formed stones designed by nature itself. Here is a collection of synthetic minerals - man-made crystals of quartz with various gammas of colour, amethysts, and others. Lastly, you see a panel made of thin cuts of jade, rhodonite, carnelian truly, a grand symphony of stone born of the wonders of nature and human genius.

Man — city — nature . . . this problem is being tackled by people in practically all branches of knowledge, ranging from architects and doctors to sociologists and historians. The process of the growth of urban communities cannot be stopped. But a city should not be turned into a ferro-concrete jungle without air, greenery and the sun.



The way the Soviet Union plans to build new towns and modernise the old ones; the conditions it is creating for the work and leisure of the urban population; the measures it is taking to protect the environment against pollution; what principles determine the solution of fundamental town-planning problems — all this is described in a special section of our exposition, called Nature and Town Planning.

A standard of beauty in the Universe

The protection of nature is a very wide concept, embracing not only the activity of most diverse institutions and establishments, ranging from governmental to scientific research, but also the education of man in a spirit of love and care for nature. The matter here concerns the moulding of the human personality, capable of rising above the narrow circle of everyday cares and the feeling of one's responsibility for, and participation in, all that is taking place around him. This is one of the conditions in achieving the harmony of the Personality, Society and Nature.

The slide showing a child with a flower is extremely symbolic and true to life. As many as 100,000 Pioneers and schoolchildren in our country are members of what are known as Blue Patrols, who have taken rivers and lakes under their observation. and are doing their bit towards keeping fish stocks from dying out. Another 150,000 boys and girls have joined together in 3,770 school forestry teams. Under the guidance of teachers and forest wardens, these teams collect tree and bush seeds and put up nests for birds. The main thing here is not the amount of seeds they collect or the number of nests they put up, but the kindling of their desire to preserve and increase the invaluable beauty of nature. The All-Russian Society for the Protection of Nature is, incidentally, no less than 22 million members strong. There are 15 Republics in the USSR and each one has such a Society. Their aggregate membership today has reached 33 million.

The activities of the All-Russian Society is depicted in children's drawings and also in the Society's badges, posters and booklets, all of which are shown in our special exposition. Nature, like love, is an eternal subject of art, most probably, because the object of art is to teach people to appreciate and admire beautiful things. What nature creates is a standard of beauty in the Universe.

The last hall of this section of the exposition is devoted to nature in its artistic expression. Articles made of papiermache, miniature paintings by the noted masters of Mstera and Fedoskino, wooden carvings made by the handicraftsmen of Bogorodskoye, painted wooden items made in Khokhloma and Gorodets, ceramics, porcelain, embroidery, lace, jewellery, and rugs — all this builds up a surprising feeling of the harmony of nature and man. This harmony inspired the works of folk art.

Nature protection is the affair of all the nations in the world

The concluding section of our exposition deals with international cooperation in the safeguarding and rational use of the natural environment. The specific point of this problem is that it is equally urgent for all the states in the world without exception. Since no state boundaries really exist in the atmosphere and on the seas and oceans, only the efforts of all the nations inhabiting our planet can prevent the further pollution of the biosphere.

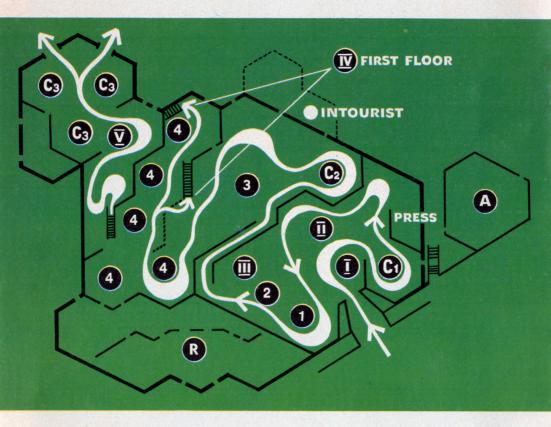
The Soviet Union is cooperating with many countries in this field. For instance, the USSR and the USA are jointly conducting research in 11 problems pertaining to environmental protection. More than 20 Ministries and departments are taking part in this work on the Soviet side. Our country has been and continues to be a sponsor of and a participant in many international agreements and undertakings aimed not only at protecting nature, but also at strengthening world peace, as can vividly be seen from our exhibits.

We have come to the end of our exposition. We thank you for your attention, and hope that we have helped to give you, at least, a general idea of the tremendous amount of work being done in the Soviet Union for the protection of nature and the rational use of its resources.



Until we meet again,
we wish you
all the very best!

Exposition plan



I. INTRODUCTORY SECTION.

Soviet State and Environmental Protection.

II. BIOSPHERE, WHAT IS IT?

C1 Cinema Hall: «Biosphere» and «My Sixth Part of the Planet»

III. MAN AND HIS ENVIRONMENT.

- 1. Air Pollution Control.
- 2. Nature and Urban Development.
- 3. Water Resources and Pollution Control.
- 4. Man, Earth, Nature.
- C₂ Cinema Hall: «Man and his Environment»

IV. NATURE PROTECTION IS THE AFFAIR OF ALL SOVIET PEOPLE (1st FLOOR)

V. THE EARTH IS THE HOME OF ALL MANKIND.

(Soviet contribution to international environmental protection).

C₃ Cinema Hall: «In the Interest's of Man's Future»

- R Restaurant and bar
- A Administration